cc: Doug
Paul
M/047/010

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155
www.ut.blm.gov

IN REPLY REFER TO:
UTU-078405
(UT-923)

FEB 17 2006

CERTIFIED MAIL--Return Receipt Requested

Mr. Dave Lewis
American Gilsonite Company
29950 South Bonanza Highway
Bonanza, UT 84008

Re: Mining Plan Federal Gilsonite lease UTU- 078405, I-30 Mine

Dear Mr. Lewis:

BLM received your Mining Plan on December 2, 2005. BLM has reviewed you submission and has the following comments.

1. Figure 1 should be put to scale. BLM requires the distance be placed on the map from the escape shaft to the main shaft drawing.

2. Figure 1 does not show a catch basin as stated on page 6 of the plan. This should also show the location of the gates (including the shaft gates).

3. Figure 2 shows less than 30 feet of surface barrier pillar on the NW side of the map. This is inconsistent with the map.

4. Reference Figure 2: American Gilsonite shows the lease boundary 1259 feet from the shaft. Based on BLM GPS survey the boundary is 1187 feet. American Gilsonite should annotate the plan that a survey will be conducted this summer to fix the situation.

5. Mining Sequence:

   - For clarification, the mining sequence should state that an upper drift will be driven and then floors will be placed between the drifts. Also that the slope will be taken all the way out to the escape shaft or lease line or another point. This work will start on the east side of the mine.
   - Then a discussion when mining will start on the west side.
   - The map should show an estimated sequence block in using the nomenclature of month 1, month 2. etc.

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6. Soil/subsoil – types need to be annotated.

7. Acres Disturbed: The plan states on page 3 that 2.5 acres will be disturbed. This is incorrect. BLM used a GPS and found the following

   a. Lands inside the fenced area - 2.16 acres
   b. Road 1466 feet long at 17ft wide - .57 acres
   c. Escape shaft area from plan - .50 acres
   d. Road to escape shaft - .07 acres (estimate)

   This totals 3.3 acres. This needs to be corrected.

8. Mine Production (General Mine startup): After contacting American Gilsonite on this issue it was decided that an average of 480 tons per month should be used. Therefore this should be reflected in the plan.

9. Escape Shaft:
   - On page 3 the plan states: "If an escape shaft is necessary . " This is inconsistent with the plan that shows an escape shaft.

   The plan goes on to state that "At approximately the 300 foot level, a horizontal drift will be pushed to the lease boundary to the south east. At this spot the escape shaft will be drilled down to this level". This indicates that the escape shaft will not be put into place until mining is completed down to the 300 foot level. This is in violation of MSHA's regulations requiring a secondary escape way. This language requires clarification.

10. Floor Levels: The plan on page 5 states that horizontal floor levels are normally established on 100 foot centers and figure 2 shows about 80 foot centers. This is inconsistent.

11. Reclamation Plan: At the present time, American Gilsonite has an approved Reclamation plan with the Utah Division of Oil, Gas and Mining. BLM has reviewed the UDOGM plan and any submitted BLM plan comments, differences, and / or deficiencies follow:

    a. The DOGM requires that 70% vegetation cover be reestablished prior to reclamation release and AGC has adopted this. BLM also requires that 70% of the species density be established prior to reclamation release.

    b. BLM agrees with the final design of the mine shaft cap(s) to be installed at the time of reclamation.

    c. The DOGM plan states that all non-usable trash will be disposed at the company's E-21 landfill site. (Then under disposal of trash it states that all waste materials will be pushed or dumped into the nearest open vein or buried nearby the mine site.) The submitted BLM plan does not address trash, but this is required.

d. The DOGM plan for backfilling and grading states that there will be no stockpiling of overburden or similar materials since this is an underground operation. However, on page 2 of the BLM plan there is an acknowledgement of soil stockpiles. This seems to be in conflict with the statement in the DOGM plan. A clarification is required. The difference could be valid if the stockpiles in the DOGM plan pertain to waste stockpiles near the shaft.

e. In the DOGM plan, it states that 6 to 12 inches of material will be put on the area to be reseeded. The plan submittal states that there is approximately 100 cubic yards (2700 cubic feet) on the I-30 stockpile. However, even using the projected lesser 2.16 acres for the site (94,000 square feet), there would not be 6-12 inches of material to spread back on the site. It would require 47,000 cubic feet of material at 6 inches thick to cover the site. The plan goes on to state that "... topsoil salvaged prior to mining will be spread by dozer to a thickness equivalent to the coverage depth prior to its removal".

The submitted BLM plan states that: "The site would be graded to conform as closely as possible to pre-mining conditions and covered with the stockpiled topsoil". BLM agrees with this approach.

f. The BLM plan currently states: "A reclamation plan would be submitted to the AO for approval prior to closure." The reclamation plan has to be submitted as part of the mining plan. The plan should address at this time, a proposed seed mix (even though a final seed mix will be determined in the grading and seeding plan) and the plan should address the fact that Pure Live Seed (PLS) and Certified Utah Prohibited Noxious Weed Free seed mix will also be utilized. Below is the recommend seed mix for this site as per the Vernal Field Office.

4lbs. Stipa comata (needle and thread grass)
4lbs. Atriplex confertifolia (Shadscale saltbush)
4lbs. Artemesia tridentata Wyomingensis (Wyoming sagebrush)

All pounds are in pure live seed.
Reseeding may be required if first seeding is not successful.
12lbs. p/acre.

BLM agrees with the fact that if the seed is broadcast then the amount should be doubled. BLM also requires that the seed tags be submitted to the AO after placing the seed.

Also, BLM would prefer that a final grading and seeding plan be submitted at the time of final reclamation.

g. The DOGM plan calls for the re-contouring and ripping of the site (Item 4). The plan states under seed bed preparation, that the area would be disked and if it is too hard it will scarified or ripped. BLM approves ripping of the site. This will ensure that there is enough ground loosened to provide for proper plant growth. However at the present time, this is not stated in the plan and it needs to be addressed.

h. Fertilization has been discussed in the DOGM plan. BLM agrees with this section, but the plan should state that any mulch that will be used must be with certified weed free hay.

i. There is no mention of toilet facilities. If a chemical toilet is to be located on-site, this should be mentioned in the plan.

12. Noxious Weeds. The plan calls for following the Utah State Department of Agriculture and the County extension plans. BLM requires that the BLM weed list also be consulted and addressed in the plan. Further, the word "pesticide" should be changed to "herbicide/pesticide."

13. Lighting/electricity. The Lessee should also address if the facilities at the I-30 shaft and/or escapeway would be illuminated during the evening or night time. There also needs to be annotation of power drops from the existing power line across the lease on Figure 1. Please indicate in the plan who owns the power line and what the plans are for removal of the line and poles as part of the reclamation plan.

14. As a connected action, AGC still must apply for and be granted a right-of-way from the Vernal Field Office to utilize, for commercial purposes, the segment of dirt road between the north border of the lease and the black-top road between State Route 45 and Little Bonanza. This connected action must be addressed in the environmental documentation as part of the overall project. (We believe you have had some contact with the Vernal Field Office.)

BLM requests that if a literature review or document is referred to in the plan, there should be a bibliography listed.

BLM cannot process your mine plan until the above requirements are addressed.

Enclosed is a copy of the DOGM Reclamation plan for your files.

If you require further information please contact Mr. Stan Perkes, (801) 539-4036.

Sincerely,

JAMES F KOHLER

James F. Kohler
Chief, Solid Minerals Branch

Enclosure:
DOGM Reclamation plan

cc: Vernal Field Office
Utah Division of Oil, Gas, and Mining (Attn. Doug Jensen)
Mine Files - UTU-078405
SPerkes:sa:02/13/06
AG/0126943/078405mineplncomments 2 16 2006

15. **Describe any proposed effluent discharge points (UPDES) and show their location on the map provided under Rule R647-4-105.2. Give the proposed discharge rate and expected water quality. Attach chemical analyses of such discharge if available.** Discharges are described in the attached NPDES permit. (Appendex II) Mines which encounter water are pumped and discharge permits acquired (Refer to page 5c for discharge locations and status.) (Refer to Appendix III for water quality reports and data). More detailed information is presented on page 5e.

16. **Vegetation - The operator is required to return the land to a useful condition and reestablish at least 70 percent of the premining vegetation ground cover.**

The ground cover percentage figure is determined by sampling and averaging the vegetation type(s) on the areas to be mined (see Attachment I for suggested sampling methods).

(a) Vegetation Survey - The following information needs to be completed based upon the vegetation survey:

Sampling method used Transects Refer to pages 6a and 6b.
Number of plots or transects 15

Ground Cover	Percent
Vegetation (perennial grass, forb and shrub cover)	14.99
Litter	
Rock/rock fragments	
Bare ground	85.01
	100%
Revegetation Requirement - 70 percent of above vegetation figure)	11.24 %

List the four (4) predominant perennial species of vegetation growing on the area.

Pinyon	Sagebrush
Shadscale	Juniper

(b) Photographs - The operator may submit photographs (prints) of the site sufficient to show existing vegetation conditions. These photographs should show the general appearance and condition of the area to be affected and may be utilized for comparison upon reclamation of the site. Photographs should be clearly marked as to the location, orientation and the date that the pictures were taken.

Page 6a Revised
(08-04-92)

EXISTING VEGETATION COVER

During June of 1983, a total of 15 random transects were conducted near existing, proposed or abandoned mine sites to determine percent vegetation cover. The location of each transect is noted on the site analysis sheets provided as Appendix IV. The transects were conducted by stretching a 100 foot cloth tape across non-disturbed areas within 500 feet of individual mine sites. Table 1, page 6b, presents a summary of the 15 transects.

The areas around the mine sites were found to be comprised of three basic vegetative types: Pinyon-Juniper, Sagebrush and Shadscale. Percent cover ranged from a low of 4.3% at Pride-of-the-West to 25.85% at Wagonhound, with an overall average of 14.99%, see Table 1, page 6b.

Reclamation will be considered successful when after at least three growing seasons, a cover of 70% of original is obtained.

TABLE 1 SUMMARY OF TRANSECTS TO DETERMINE VEGETATION COVER PERCENT

JUNE 1983

NEAREST SITE	TRANSECT	TRANSECT % COVER			COVER TYPE
		OVERSTORY	UNDERSTORY	TOTAL	
B-38	1	10.1	1.85	11.95	Sagebrush
B-44	2	15.2	---	15.2	Sagebrush
E-29 & 14	3	11.2	3.4	14.6	Sagebrush
H-1 & 2	4	17.60	.15	17.75	Juniper
H-10	5	14.8	5.4	20.2	Juniper
I-9 & 10	6	18.2	.5	18.7	Sagebrush
I-15	7	12.2	.3	12.5	Sagebrush
LE-6	8	2.7	5.7	8.4	Sagebrush
PW-2	9	4.0	.3	4.3	Sagebrush
PW-undst *	10	15.9	---	15.9	Riparian
PW-undst *	11	10.4	.2	10.6	Juniper
PW-undst *	12	8.7	3.1	11.8	Shadscale
R-2 & 3	13	16.8	4.6	21.4	Juniper
R-4	14	14.6	1.1	15.7	Juniper
WH-12	15	24.35	1.5	25.85	Sagebrush

* These are proposed mine sites and therefore the transect is of the actual mine site.

SOILS

Soil was sampled at each mine site to determine the suitability for re-vegetation (see page 6d). Where topsoil existed, it was sampled. If there was no topsoil salvaged, the sample was then collected from the center of the mine site. Laboratory analysis is presented in Appendix IV. Analysis for each individual mine site sampled has been transposed onto the individual "mine site data" sheets, see Appendix I.

The pH of the soil sampled was found to range between 7.8 and 8.7.

Prior to reclamation of an individual site, soil analysis of the site will be compared to the suitability chart presented on page 6d. Should deficiencies or imbalances of conditions be present, resulting in non-suitable conditions, soil amendments will be made. These amendments will consist of any or all of the following: mulching at 2,000 pounds per acre, addition of phosphate, nitrogen, potassium, calcium sulfate or any other additive that may be required. Plans for the individual sites will necessarily be site specific and will receive concurrence from Utah Department of Oil, Gas and Mining personnel prior to reclamation procedures.

TOPSOIL SUITABILITY CRITERIA AND EXISTING CONDITIONS

Parameter	Suitability Good	Fair	Poor	Range for AGC Soils
Electrical Conductivity (EC)	0-4	5-8	9-16	0.3-19.0
Nitrogen (NO_3 -ppm)	NA*			0.1-165
Organic Carbon (%)	NA*			.28-10.6
Phosphorus (PO_4 -ppm)	NA*			0.3-38.0
pH (Activity at 25°)	6.1-7.8	5.1-6.1 7.9-8.4	8.5-9.0	7.8-8.7
Saturation (%)	25-80	80; 25		25.1-62.4
Sodium Absorbtion Ratio	0-6	6-10	11-15	0.6-40.0
Potassium (ppm)	>60	<60		0.4-38.0
Textures (USDA class)**				
	sl, l, sil, vfsl, fsl	scl. cl, sicl, ls, lfs	sic s	sl, l, sil, scl, vfsl, fsl, cl sicl, sc, ls, lfs

*NA = Not applicable as fertilizers are to be used. Refer to page 10a.

** sl - sandy loam, l = loam, sil = silty loam, scl = sand clay loam, vfsl = very fine sandy loam, fsl = fine sand loam, cl = clay loam, sicl = silty clay loam, sc = sand clay, ls = loamy sand, lfs = loamy fine sand.

TOPSOIL STORAGE AND PROTECTION

The Mine Safety and Health Administration (MSHA) requires roads to be bermed for safety purposes in certain instances. Rather than disturbing more land to collect material for these berms, the topsoil, when scraped for road construction purposes, will remain at the side of the road serving as a berm. These berms will then be seeded with the same seed mix to be used for final reclamation of the site.

Topsoil will be stockpiled in the following manner by dozer or bucket loader.

1. Stockpiles will be located on relatively level areas, protected from wind, water erosion, vehicular traffic, and contaminants. Stockpiles will be constructed on upland areas to minimize drainage into stockpile areas.

2. Stockpiles will be rectangular in shape to accommodate equipment capabilities.

3. Grading and contouring will be directed towards the creation of maximum outslopes of 2H (horizontal) to 1V (vertical).

4. Topsoil to be stockpiled for greater than six months will be seeded to control erosion. The seed mix designated for the site will also be used on the stockpile, since most piles should be quite small. Seeding will be conducted during April and May or October and November. Fertilizer will be applied the first spring following seeding.

5. All stockpiles will be marked with "Topsoil Stockpile/Do Not Disturb". Current topsoil stockpiles are presented with the individual mine inventory data sheets.

6. Refer to Topsoil inventory, page 6f for status.

Page 6f (added)
(08-04-92)

TOPSOIL INVENTORY

Site	Stock Pile Yards^3	Berms Yards^3	Total Yards^3
B-16 / B-12	200	200	400
E-14	---	100	100
E-15	---	100	100
E-29 / E-28	---	200	200
E-30	50	50	100
E-30	---	100	100
H-1	---	---	---
H-2	---	50	50
H-10	166	50	216
I-9	---	---	---
I-10	---	---	---
I-15	184	10	194
I-16	---	---	---
I-18	---	---	---
I-24	---	---	---
I-30		100	100
LE-3	---	---	---
LE-4	---	---	---
LE-5	---	50	50
LE-6	185	100	285
RW-2	---	---	---
RW-3	---	---	---
RW-4	---	---	---
WH-12	---	---	---
			1895

17. **Soils** - The plan shall include an order 3 Soil Survey (or similar) and map. This information is needed to determine which soils are suitable for stockpiling for revegetation. This soil data may be available from the local Soil Conservation Service office, or if on public lands, from the land management agency. The map needs to be of such scale that soil types can be accurately determined on the ground (see Attachment I).

(a) Each soil type to be disturbed needs to be field analyzed for the following:

Depth of soil material 3 to 12 inches.
Volume (for stockpiling) Refer to page 6f 1895 cu. yds.
Texture (field determination) sl, l, sil, cl, sicl, sc, scl, vfsl, ls, lfs, fs
pH (field determination) 7.8 to 8.7
(cross reference with item IV - 5) Refer to page 6c and 6d.

(b) Where there are problem soil areas (as determined from the field examination) laboratory analysis may be necessary. Soil samples to be sent to the laboratory for analysis need to be about one pint in size, properly labeled, and in plastic bags. Each of the soil horizons on some sites may need to be sampled.

18. **Provide a narrative description of the geology of the area and/or a geologic cross section:** A stratigraphic column is provided on page 5a.

IV. IMPACT ASSESSMENT (Rule R647-4-109)

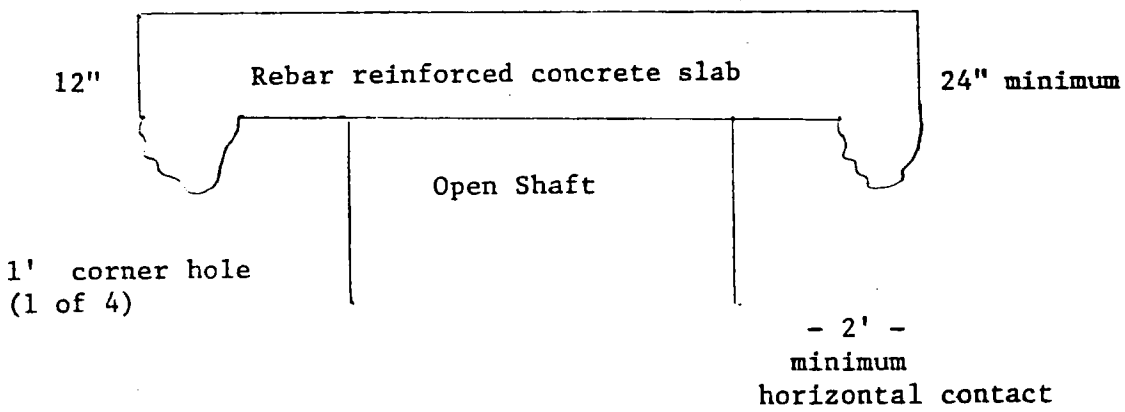
Please provide a general narrative description identifying potential surface and/or subsurface impacts. Where applicable, this description should include surface and groundwater systems, threatened or endangered species or their critical habitats, existing soil resources for reclamation, slope stability, erosion control, air quality, and public health and safety.

The reclamation potential has been demonstrated in various study plots. Because of that and the fact that the mining is underground and the material mined is non toxic there is little if any impact expected on the air or water quality. There are no identified critical habitats that have been impacted or are expected to be impacted by the mining operations.
There are hazards to public safety stemming from pre-1975 mining operations because of mine openings at the surface. However, current operations are minimizing such safety hazards through design methods, planning and improved property control.

A, C - It is the policy of American Gilsonite to keep all open veins fenced and posted and to periodically inspect these fences and repair as necessary. All active mine shafts are fenced, and abandoned mine shafts are either fenced or capped with a twelve inch thick reinforced concrete slab. Refer to schematic below.

B - All non-usable trash (wood, municiple trash, paper, etc.) is disposed of at the Company's E-21 LANDFILL site. Scrap metal which can be re-used or re-cycled is stored in the SALVAGE YARD near Bonanza. Waste oil and solvents are returned monthly to vendors for re-cycling. Sewage for the CAMP area is discharged into evaporative ponds north of the townsite in accordance with EPA permit UT-0020451, refer to Map II.

Refer to Appendix II for Landfill permit.



V. RECLAMATION PLAN (Rule R647-4-110)

1. **List current land use(s) other than mining:** Wildlife and livestock grazing.

2. **List future post-reclamation land-use(s) proposed:** Wildlife and livestock grazing.

3. **Describe each phase of reclamation of the minesite in detail under the following categories:**

(a) Disposal of Trash

Describe how buildings, foundations, trash and other waste materials will be disposed of. All of the waste materials will be pushed or dumped into the nearest open vein or buried nearby each minesite.

(b) Backfilling and Grading

Describe equipment and methods to be employed, amount of materials to be moved and final disposition of any stockpiled materials. There will be no stockpiling of overburden or similar materials since this is an underground operation.

(c) Soil Material Replacement

In order to reestablish the required ground cover, one to two feet (depending on underlying material) of suitable soil material usually has to be redistributed on the areas to be reseeded. If the stockpiled soil isn't sufficient for this, soil borrow areas will need to be located.

How much soil material is planned to be put on the area to be reseeded?

6 to 12 inches

Where will this material come from? The material will be retrieved from topsoil stockpiles, berms and nearby borrow locations.

How will it be transported and spread? The stockpiles and berms will be dozed and graded onto the disturbed area. Any borrow material more than 300 feet away will be hauled by dump truck and spread in the same manner.

Page 8a Addition
(08-04-92)

Item 4

Site reclamation will be performed during the fall (September-November) following abandonment of an individual mine. Preliminary results from reclamation plantings of fall 1983 and spring 1984 indicate that fall reclamation will be the most successful in the desert climate of Bonanza.

All equipment and structures will be removed completely from the site. The shafts will be sealed with a cement pad as described on page 7A. The site will then be ripped by a dozer to a minimum depth of eight (8) inches.

Most locations are currently or are anticipated to be approximately level. However, those that are not will be returned as close to the original contours as possible. Slopes are not expected to exceed 2H:1V in any case.

When reclaimed slopes are steep, contour trenchs will be constructed to catch sediments from runoff. These trenches will reduce the velocity and scouring ability of any surface flow and provide increased retention of water and slow the release of runoff through improved infiltration.

Following recountouring and ripping of the site, topsoil salvaged prior to mining will be spread by dozer to a thickness equivalent to the coverage depth prior to its removal. Mulch may be added at this time, depending upon the test results, past and future. The mulch will be either spread by hand or automated spreader at a rate of two thousand (2,000) pounds per acre. Seed and fertilizer will then be added. If seeded and fertilized by broadcast methods, the site will be crimped by "walking" a dozer over it. If seeded by the Laird Seed Drill, crimping will not be necessary as the drill performs this while seeding.

Most fertilizer admendments will be spread at the time (fall) of reclamation. Nitrogen, when needed, will be spread in the spring. Refer to page 10a for fertilizer rates. Because of the wide soil diversity experienced over the operation, each mine site must be treated separately, thus no "generic" plan is possible. Refer to the individual mine site inventory sheets in Appendix I for soil specifics.

(d) Seed Bed Preparation

Describe how the seedbed will be prepared and equipment to be used. The seedbed will be disked to a depth of 6" - 8" with a farm type tractor pulling a disking machine. If the area is too hard it will first be worked by scarifier or ripper.
(The Division recommends ripping or discing six inches deep)

(e) Seed Mixture - List the species to be seeded:

Species Name	Seeding Rate (lbs Pure Live Seed/Acre)
Western Wheatgrass (Agropyron Smithis)	11
Smooth Bromegrass (Bromus inermis)	5
Fourwing Saltbrush (Atriphex Canescens)	5
Yellow Sweetclover (Melilotus officinalis)	1
Alfalfa (Medicago Sativa Var. Ladak)	1
Or a seed mixture suggested by DOGM	

(The Division recommends seeding 20 lbs./acre of native and introduced adaptable species of grass, forb, and browse seed and will provide a specific species list if requested)

(f) Seeding Method
Describe method of planting the seed. Seeding will be done in the fall by drilling. If drilling is not possible the seed amounts will be doubled for broadcast planting.

(The Division recommends planting the seed with a rangeland or farm drill, or if broadcast seeded, harrow or rake the seed 1/4 to 1/2 inch into the soil. Fall is the preferred time to seed)

(g) Fertilization
Describe fertilization method and rate. Mulching at 2000 pounds per acre, addition of phosphate, nitrogen, potassium, calcium sulfate or any other additive that may be required.

(h) Other Revegetation Procedures
If other reclamation procedures, such as mulching, irrigation, etc., are planned, describe them. _____

VI. VARIANCE (Rule R647-4-112)

Any planned deviations from Rule R647-4-007 (Operating Practices), R647-4-108 (Hole

Plugging Requirements), or Rule R647-4-111 (Reclamation Practices) must be identified below.

Rule Number	Title/Category

NO VARIANCES REQUESTED

For each variance requested, attach a narrative statement describing and delineating the area proposed to be affected by the variance, justifying the need for the variance, and discussing alternate methods or measures to be utilized.

VII. SURETY (Rule R647-4-113)

A Reclamation surety must be provided to the Division prior to final approval of this application. In calculating this amount, the Division will consider the following major steps:

1) Clean-up and removal of structures.
2) Backfilling, grading and contouring.
3) Soil material redistribution and stabilization.
4) Revegetation (preparation, seeding, mulching)

To assist the Division in determining a reasonable surety amount, please attach a reclamation cost estimate which addresses each of the above steps.

VIII. SIGNATURE REQUIREMENT

RECEIVED
AUG 2 1 1992
DIVISION OF
OIL, GAS & MINING

I hereby certify that the foregoing is true and correct.

Signature of Operator/Applicant: K. Clark Christensen

Name (typed or print): K. Clark Christensen

Title/Position (if applicable): Vice President Operations

Date: 8-11-92

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides for maintenance of confidentiality concerning certain portions of this report. Please check to see that any information desired to be held confidential is so labeled and included on separate sheets or maps.

Only information relating to the location, size or nature of the deposit may be protected as confidential.

Confidential Information Enclosed: (✓) Yes ( ) No